

A1
connected by the stabilizing section to the firing space;
spinnerts which receive molten glass from the feeder; and
mechanisms which pull fibers from the spinnerets.

Please add new claims 19 and 20 which read as follows:

- b33 19. An apparatus for producing basalt fibers, comprising of:
- means for preheating basalt;
 - means for charging the preheated basalt into a melting furnace;
 - means for heating the basalt in said furnace to form a glass mass;
 - means for stabilizing glass mass in a stabilizing section of the melting furnace until it reaches a fiber manufacturing temperature;
 - feeder means;
 - means for introducing the stabilized glass mass into said feeder means;
 - means for further stabilizing the glass mass in said feeder means to obtain a glass mass having the composition

A2

$$\frac{\text{Al}_2\text{O}_3 + \text{SiO}_2}{\text{CaO} + \text{MgO}} \geq 3$$

$$\frac{\text{FeO}}{\text{Fe}_2\text{O}_3} \geq 0.5$$

$$\frac{2\text{Al}_2\text{O}_3 + \text{SiO}_2}{2\text{Fe}_2\text{O}_3 + \text{FeO} + \text{CaO} + \text{MgO} + \text{K}_2\text{O} + \text{Na}_2\text{O}} > 0.5$$

means for forming fibers by pulling the further stabilized glass mass from
spinneret means which receive glass from the said feeder means.

20. The apparatus of claim 8 wherein said basalt receiver is a basalt weigher.